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(54) POWDERY SOLID COSMETIC

(57)Abstract:

PURPOSE: To obtain the subject cosmetic capable of being easily coated on skins, giving a soft and smooth touch, having good adhesivity and further giving a good finish without giving a load to the skins by compounding talc with a specific, elastomer spherical powdery material in specified amounts.

CONSTITUTION: Talc (60.0-99.5wt.%) and organopolysiloxane elastomer spherical powder having an average particle diameter of 1-15 μ m (0.5-30.0wt.%) are together used. The elastomer spherical powder is obtained e.g. by homogeneously mixing an addition reaction type curable organopolysiloxane composition in the presence of a surfactant in water, releasing the mixture into $\geq 50^{\circ}\text{C}$ hot water, drying the cured product, etc. The powdery solid type cosmetic is obtained by compounding and homogeneously dispersing the talc, the powder containing the organopolysiloxane elastomer spherical powder and, if necessary, an oily component.

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CLAIMS

[Claim(s)]

[Claim 1] The charge of powder solid makeup characterized by containing 60.0 - 99.5 % of the weight, and the organopolysiloxane elastomer spherical powder of 1-15 micrometers of mean particle diameters for talc 0.5 to 30.0% of the weight.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] Without giving a burden to the skin, it is easy to apply this invention to the skin, it has the soft and smooth touch, also has a feeling of adhesion further, and relates to the outstanding charge of powder solid makeup which has the effect finished finely.

[0002]

[Description of the Prior Art] Talc is used abundantly at the conventional charge of powder solid makeup from that ***** is good, having the smooth use touch, the adhesion to the skin being good, etc. However, when talc was blended so much, the charge front face of powder solid makeup became hard, and there was a fault [say / that the soft touch is lost] which is easy to carry out caking and which the charge's of makeup and ** seldom apply bad.

[0003]

[Problem(s) to be Solved by the Invention] ***** whose this invention persons are the advantages of talc in view of such a situation, without giving a burden further to the skin taking advantage of the smooth use touch, adhesion, etc. The result examined zealously that the charge of powder solid makeup which is easy to apply to the skin, has the soft touch, and makes a beautiful result possible should be developed, By containing the organopolysiloxane elastomer spherical powder of 1-15 micrometers of mean particle diameters 0.5 to 30% of the weight, it finds out that the above-mentioned purpose can attain and came to complete this invention. Hereafter, the configuration of this invention is explained in full detail.

[0004]

[Means for Solving the Problem] That is, this invention relates to the charge of powder solid makeup characterized by containing 60 % of the weight or more and the organopolysiloxane elastomer spherical powder of 1-15 micrometers of mean particle diameters for talc 0.5 to 30% of the weight. The talc used in this invention is the detailed white powder which made the water magnesium silicate the principal

component, and should just satisfy cosmetics raw material criteria. Talc is a component required since ***** is good while the feeling of inunction to the skin is smoothed and the use touch of the feeling of adhesion is raised, in order to make it the shape of solid. When this invention has many loadings of talc, the effect appears more notably. namely, the content of talc -- the inside of the charge whole quantity of powder solid makeup of this invention -- it is 80.0 - 95.0 % of the weight more preferably 70.0 to 95.0% of the weight 60.0 to 99.5% of the weight At less than 60.0 % of the weight, the advantage of talc does not appear, but ***** is bad and is inferior to the feeling of adhesion to the skin.

[0005] Especially the modality of hardenability organopolysiloxane constituent used as the raw material of the organopolysiloxane elastomer spherical powder of 1-15 micrometers of the mean particle diameters used in this invention is not what is limited. The organopolysiloxane which has silicon atomic-union hydrogen atom inclusion diorganopolysiloxane and a silicon atomic-union vinyl group under platinum system catalyst presence by the addition reaction Addition-reaction hardening type organopolysiloxane constituent; to harden To chain both ends, a hydroxyl group The diorganopolysiloxane and the silicon atomic-union hydrogen atom which it has The diorganopolysiloxane which it has The diorganopolysiloxane and the organosilanes of a adding-water resolvability which have a hydroxyl group in the condensation-reaction hardening type organopolysiloxane constituent; chain both ends which are made to carry out a dehydrogenation and are hardened under presence of an organic-tin compound under-presence-of-an-organic-tin compound or-- titanic-acid ester The condensation-reaction hardening type organopolysiloxane constituent which is made to carry out a condensation reaction and is hardened (dehydration, ** *****, a ** oxime, a ** amine, a deamidation, a ** carboxylic acid, and a ** ketone are illustrated as a condensation reaction here.) ; the high-energy line hardening type organopolysiloxane constituent hardened by the peroxide hardening mold organopolysiloxane elastomer constituent; gamma ray, the ultraviolet rays, or electronic irradiation which carries out heating hardening according to an organic peroxide catalyst is illustrated.

[0006] It is an addition-reaction hardening type organopolysiloxane constituent from the point of excelling in the homogeneity of a cure rate being quick or hardening preferably. Especially a desirable thing consists of the organopolysiloxane which has at least two low-grade alkenyl machines in (A) 1 molecule, organopolysiloxane which has at least two silicon atomic-union hydrogen atoms in (B) 1 molecule, and a (C) platinum system catalyst as such an addition-reaction hardening type organopolysiloxane constituent.

[0007] The substitute monovalent hydrocarbon group which has a substitute alkyl group; phenyl group like a methyl group, an ethyl group, a propyl group, a butyl, an alkyl group; 2-phenylethyl machine like an octyl machine, 2-phenylpropyl machine, 3 and 3, and 3-truffe ***** propyl group as other organic machines combined with the silicon atom of the organopolysiloxane used as the base resin of the hardened type organopolysiloxane constituent mentioned above, a tolyl group, an aryl group; epoxy group like a xylyl group, a carboxylate machine, a sulfhydryl group, etc. is illustrated.

Organopolysiloxane elastomer spherical fine particles The addition-reaction hardening type, the condensation reaction type, or peroxide hardening type organopolysiloxane constituent mentioned above It mixes with water under presence of a surfactant like a nonionic surface active agent, an anionic surface active agent, a cationic surface active agent, or an amphoteric surface active agent. By the gay mixer, the colloid mill, the homogenizer, the propeller type mixer, etc., uniformly After mixture, The technique; addition-reaction hardening type which emits into hot water 50 degrees C or more, is made to harden, is made to dry, and is obtained, The technique; addition-reaction hardening type, condensation-reaction hardening type which are made to spray and harden the technique; energy-line

hardening type organopolysiloxane constituent which sprays a condensation-reaction hardening type or a peroxide hardening type organopolysiloxane constituent directly into a heat style, is made to harden it, and is obtained under high-energy irradiation, and obtain fine particles, It is obtained by the technique of well-known grinders, such as a ball mill, an atomizer, a kneader, and a roll mill, grinding what stiffened the peroxide hardening type or the high-energy hardening type organopolysiloxane constituent under high-energy irradiation, and obtaining fine particles etc. The technique of being mixed with water under presence of a surfactant like a nonionic surface active agent, an anionic surface active agent, a cationic surface active agent, or an amphoteric surface active agent, and emitting uniformly an addition-reaction hardening type, a condensation-reaction hardening type, and a peroxide hardening type organopolysiloxane constituent after mixture and into hot water 50 degrees C or more, making harden them by the gay mixer, the colloid mill, the homogenizer, the propeller type mixer, etc., making dry, and acquiring from the point of moreover obtaining spherical small fine particles by the homogeneity of a particle diameter is desirable. The detail of this component is indicated by JP,4-66446,B, JP,2-243612,A, and JP,4-17162,B, and training fill E-506C (tradename by Dow Corning Toray Silicone, Inc.) etc. is mentioned as commercial elegance, for example.

[0008] The mean particle diameter of this component is required for that it is 1.0-10.0 micrometers to make possible preferably 1.0-15.0 micrometers of the soft touches and beautiful results in the ease of applying to the skin at the-charge of-powder-solid-makeup of this invention. It is hard to apply to the skin and the soft touch is not acquired, but when 15.0 micrometers is exceeded, it is rough with less than 1.0 micrometers, and there is admiration. In this invention, the loadings of organopolysiloxane elastomer spherical fine particles are 0.5 % of the weight - 15.0 % of the weight more preferably 0.5 to 20.0% of the weight 0.5 to 30.0% of the weight. At less than 0.5 % of the weight, loadings are inferior to the feeling of adhesion to the skin, when there are few improvement effects of the fault of usability and they exceed 30.0 % of the weight.

[0009] The powder other than the above-mentioned component is usually blended with the charge of powder solid makeup of this invention. As powder used by this invention, a kaolin, a mica, a sericite, boron nitride, Inorganic powder, such as a barium sulfate, a calcium carbonate, a zeolite, and a hydroxyapatite, Polyamide resin, polyethylene powder, polymethyl-methacrylate powder, Organic powder, such as silicone resin powder, a titanium dioxide, a zinc white, a red iron oxide, A yellow iron oxide, a black iron oxide, cobalt violet, chromium hydroxide, ultramarine blue, Berlin blue, a titanium oxide covering mica, the red of No. 201, the red of No. 202, the red of No. 223, The processing powder which processed these powder, such as pearl pigments, such as color pigments, such as the yellow of No. 4 and blue of No. 1, and mica titanium, with a metallic soap, silicone, amino acid, the dextrin derivative, the halogenated compound, etc. is raised. However, it is not limited to the above-mentioned component that what is necessary is just powder applicable to common cosmetics.

[0010] 80.0 - 100.0 % of the weight in the charge whole quantity of powder solid makeup is suitable for the loadings of the whole powder in the charge of powder solid makeup of this invention. It can obtain by blending an oil content if needed [the fine particles and if needed] which contain talc and organopolysiloxane elastomer spherical fine particles in obtaining the charge of powder solid makeup of this invention, and carrying out distributed mixture uniformly. An oil content, antiseptics, an antioxidant, a medicine, perfume, a film forming agent, an ultraviolet ray absorbent, a surfactant, a **** agent, etc. can be added to the charge of powder solid makeup of this invention in the domain which does not spoil an effect of the invention. If an oil content is illustrated, hydrocarbon system oil contents, such as a liquid paraffin, squalane, vaseline, and a micro crystalline wax, Ester oil, such as the isopropyl myristate, cetyl iso octanoate, and glyceryl trioctanoate, An octamethyl tetrapod siloxane,

decamethyl pentasiloxane, dimethylpolysiloxane, Silicon oil, such as a methylphenyl polysiloxane, the dimethylpolysiloxane which presents the shape of soft rubber, Macromolecule silicone, such as terminal hydroxyl-group inclusion dimethylpolysiloxane and a terminal hydroxyl-group inclusion methylphenyl polysiloxane, Lanolin, a ***** wax, olive oil, coconut oil, safflower oil, the castor oil, cotton seed oil, a jojoba oil, a cull navarho, a macadamia-nuts oil, fatty acids, and higher alcohol are mentioned.

[0011]

[Example] Next, although the example of this invention is explained, this invention is not limited to these. In addition, loadings are weight %.

[0012]

Example 1 Presto powder (1) talc 93.0 (2) sericites 3.0 (3) color pigments Optimum-dose (4) training fill E-506C 2.0 (5) antiseptics Optimum-dose (6) perfume Optimum dose (process) (1) After mixing - (5) with a blender, (6) is sprayed after that which performs the toning and it mixes uniformly. After a grinder grinds this, compression molding of the sieve is carried out at through and an inside pan.

[0013]

Example 2 Powdery foundation (1) talc 65.0 (2) sericites 5.0 (3) myristic-acid zinc 2.0 (4) titanium oxide 5.0 (5) color pigments Optimum-dose (6) training fill E-506C 10.0 (7) squalane 6.0 (8) myristic-acid octyl 3.0 (9) monochrome oleic-acid sorbitan 1.0 (10) antiseptics, antioxidant Optimum-dose (11) perfume Powdery foundation was obtained like the optimum-dose (process) example 1.

[0014]

Example 3 Foundation in two ways (1) siliconization talc 60.0 (2) siliconization mica 2.0 (3) myristic-acid zinc 5.0 (4) siliconization titanium oxide 5.0 (5) siliconization color pigment Optimum-dose (6) training fill E-506C 15.0 (7) squalane 4.0 (8) solid paraffin 1.0 (9) dimethylpolysiloxane 3.0 (10) octyl methoxycinnamate 1.0 (10) antiseptics, antioxidant Optimum-dose (12) perfume The foundation in two ways was obtained like the optimum-dose (process) example 1.

[0015]

Example 4 Powdery foundation (1) siliconization talc 75.0 (2) siliconization titanium oxide 4.0 (3) siliconization color pigment Optimum-dose (4) training fill E-506C 17.0 (5) dimethylpolysiloxane 3.0 (6) monochrome oleic-acid sorbitan 1.0 (7) antiseptics, antioxidant Optimum-dose (8) perfume Powdery foundation was obtained like the optimum-dose (process) example 1.

[0016]

Example 5 Presto powder (1) talc 85.0 (2) sericites 3.0 (3) color pigments Optimum-dose (4) training fill E-506C 12.0 (5) antiseptics Optimum-dose (6) perfume Presto powder was obtained like the optimum-dose (process) example 1.

[0017]

Example 1 of a comparison Presto powder (1) talc 93.0 (2) sericites 5.0 (3) color pigments Optimum-dose (4) antiseptics Optimum-dose (5) perfume Presto powder was obtained like the optimum-dose (process) example 1.

[0018]

Example 2 of a comparison Powdery foundation (1) talc 60.0 (2) titanium oxide 3.0 (3) color pigments Optimum-dose (4) training fill E-506C 35.0 (5) myristic-acid octyl 1.0 (6) monochrome oleic-acid sorbitan 1.0 (7) antiseptics, antioxidant Optimum-dose (8) perfume Powdery foundation was obtained like the optimum-dose (process) example 1.

[0019] Usability etc. was evaluated about each example and the example of a comparison. Evaluation had the five phase evaluation shown in ten female special panels in Table 1 performed, and an evaluation result which is shown below by the average was displayed.

[0020]

[Table 1]

***** evaluation item 1 2 3 4 5

***** Lightness of mileage It is

heavy. It is a little heavy. Common It is a little light. It is light. Smoothness There is nothing. There is

nothing a little. Common It is a little. It is. Soft feeling There is nothing. There is nothing a little.

Common It is a little. It is. The feeling of adhesion there is nothing There is nothing a little. usually -- It

is a little. It is. ***** bad -- a little bad usually -- A little good Good

***** [0021] More than display

O:average 4.5of evaluation result O : Less than [or more / ** / 3.5 4.5] ** : Less than [or more / ** /

2.5 3.5] x : The result based on the evaluation result of the less than [less than / ** / 1.5 or more /

2.5xx:** 1.5] above is shown in Table 2.

[0022]

[Table 2]

***** Lightness of

mileage Smoothness Soft feeling Feeling of adhesion *****

***** The

example 1 0 0 0 0 0 ** 2 0 0 0 0 ** ** 3 0 0 0 0 ** ** 4 0 0 0 0 0 ** 5 0 0 0 0 0 Example

of comparison 1x x xx 0 0** 2 00 0x

xx***** [0023]

[Effect of the Invention] As explained above, when the charge of powder solid makeup and ** of this invention are good and rub ointment on the skin, it has the smooth and soft touch, and it combines and has a feeling of adhesion.
